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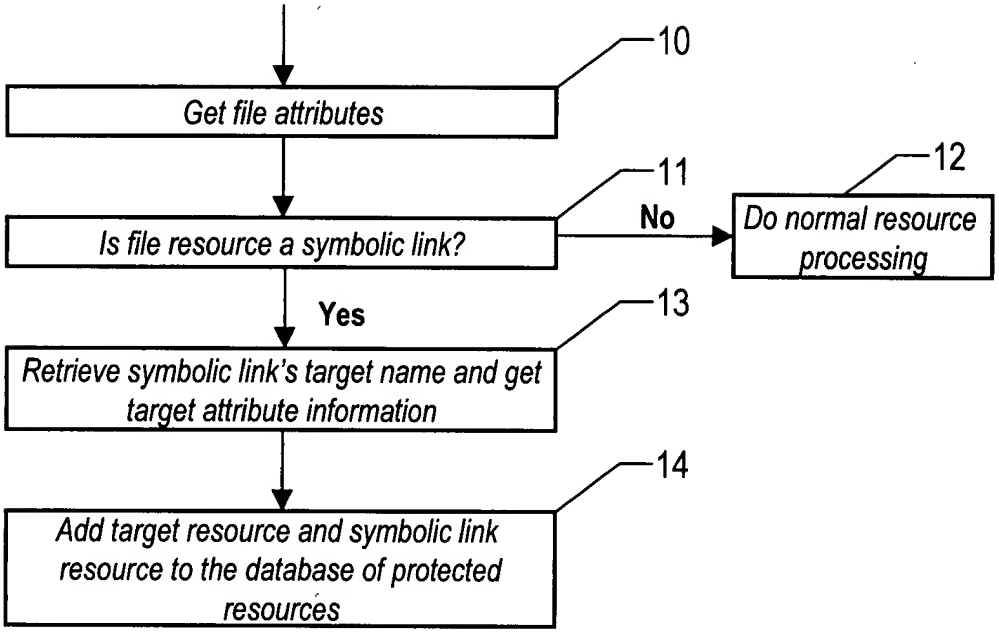

FIG. 1

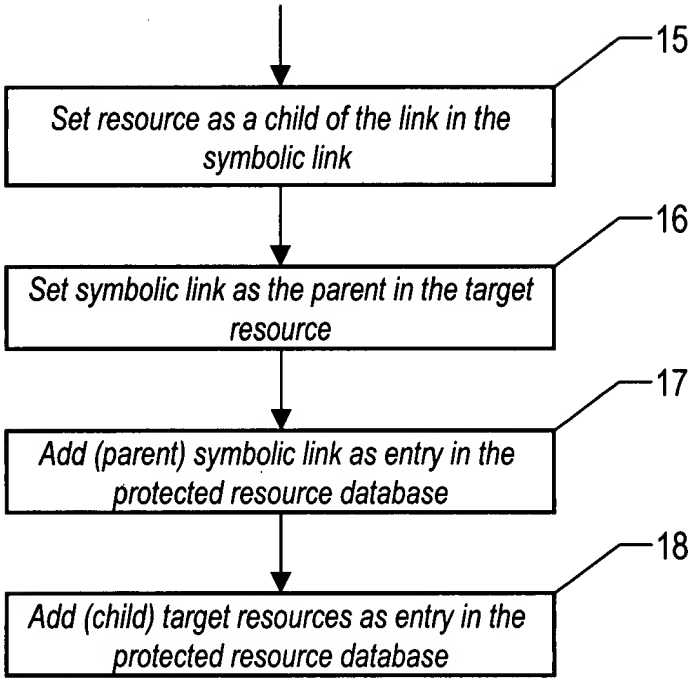
15
Set resource as a child of the link in the symbolic link
16
Set symbolic link as the parent in the target resource
17
Add (parent) symbolic link as entry in the protected resource database
18
Add (child) target resources as entry in the protected resource database

FIG. 2

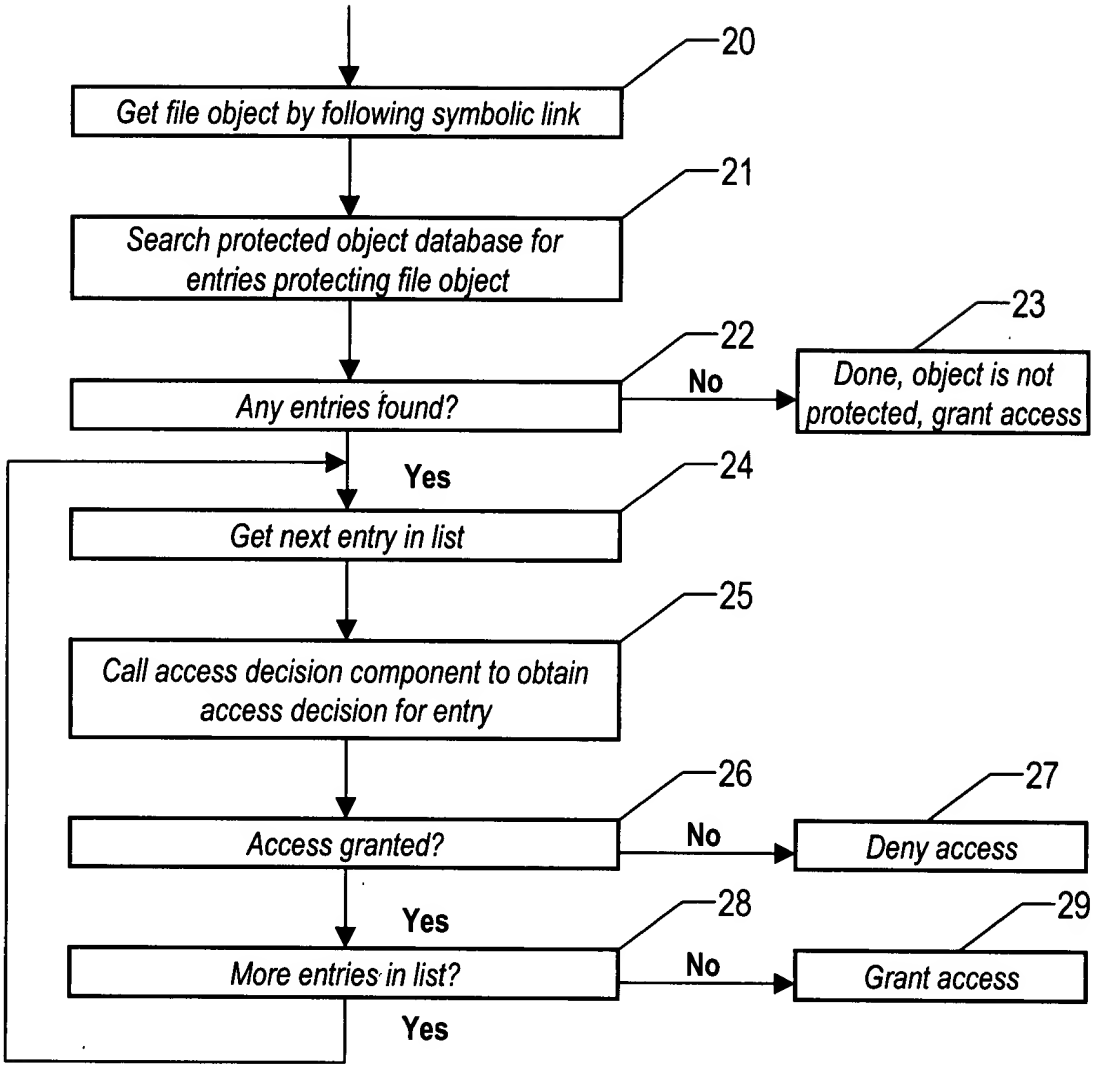
20
Get file object by following symbolic link
21
Search protected object database for entries protecting file object
22
Any entries found?
No
23
Done, object is not protected, grant access
Yes
24
Get next entry in list
25
Call access decision component to obtain access decision for entry
26
Access granted?
No
27
Deny access
Yes
28
More entries in list?
No
29
Grant access
Yes

FIG. 3

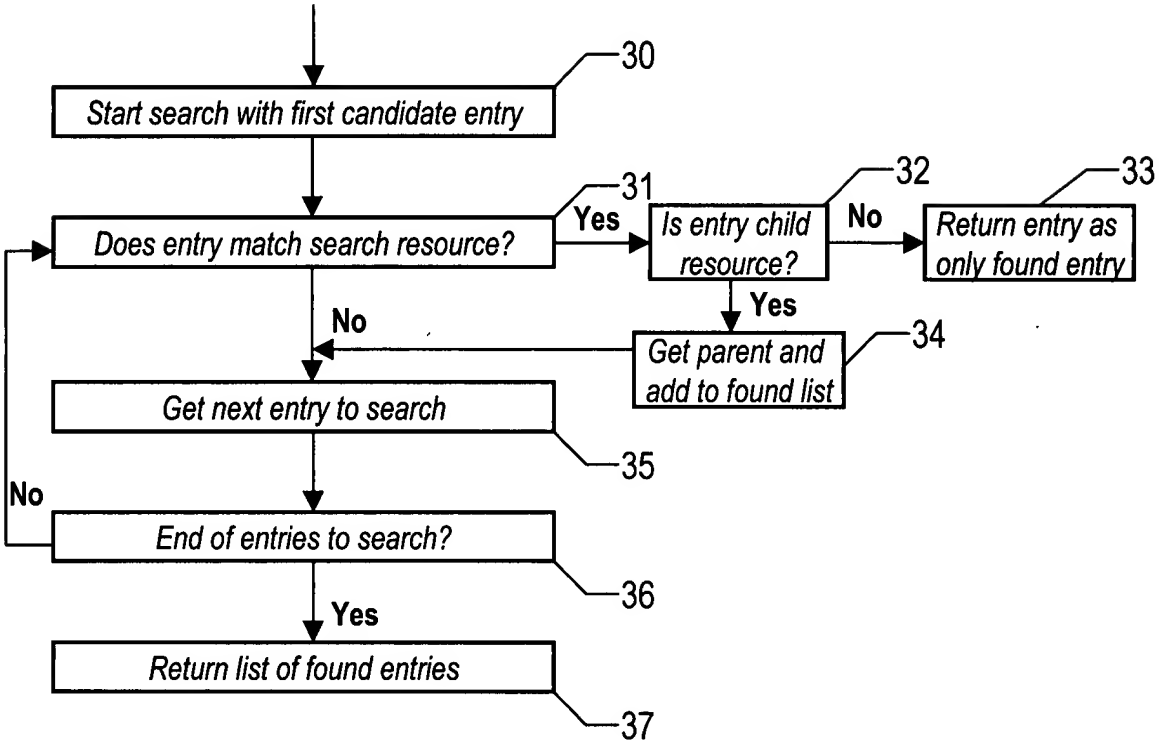
Start search with first candidate entry
30
Does entry match search resource?
31
Yes
Is entry child resource?
32
No
Return entry as only found entry
33
Yes
No
Get parent and add to found list
34
Get next entry to search
35
No
End of entries to search?
36
Yes
Return list of found entries
37

FIG. 4

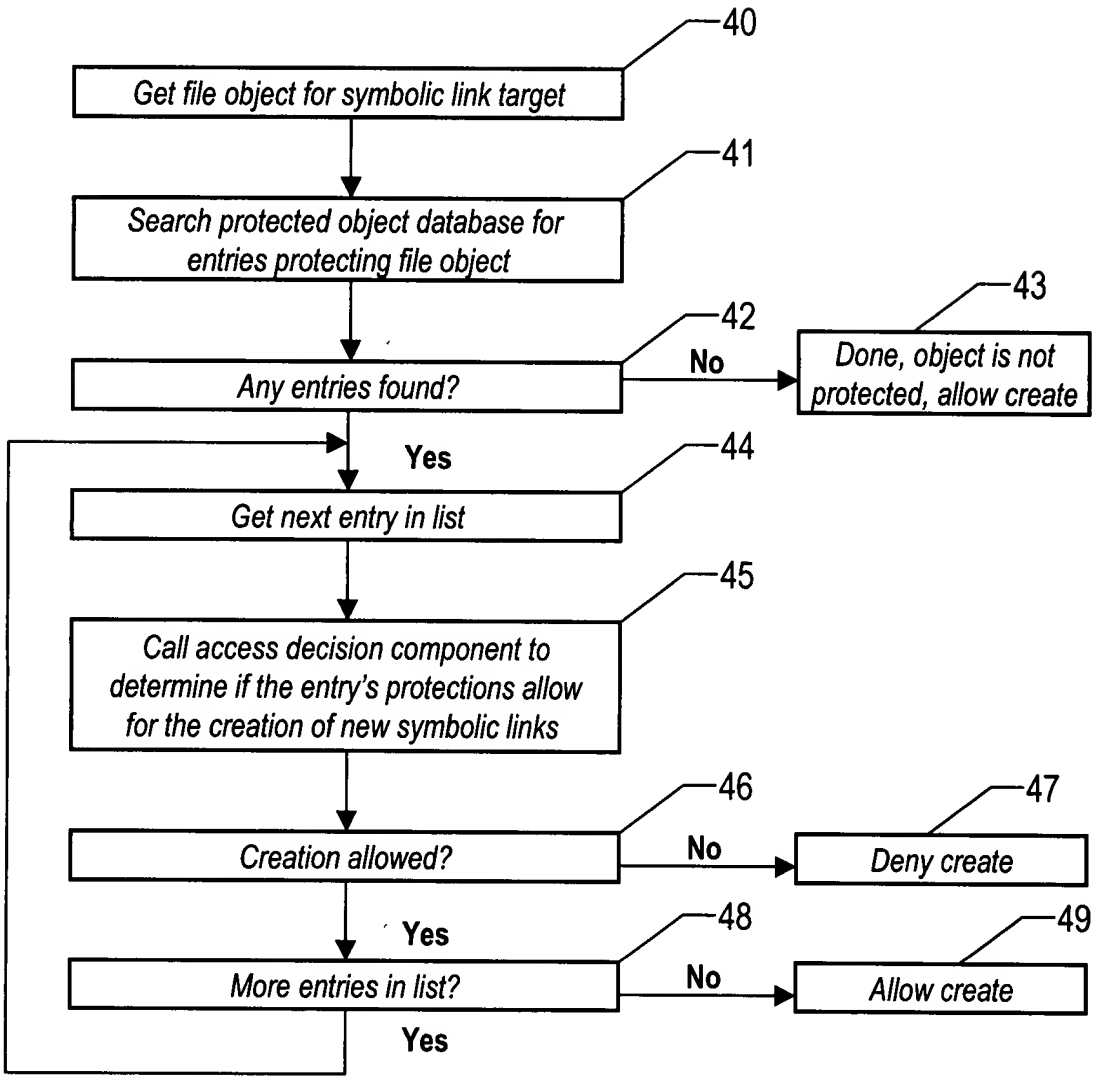
40
Get file object for symbolic link target
41
Search protected object database for entries protecting file object
42
Any entries found?
No
43
Done, object is not protected, allow create
Yes
44
Get next entry in list
45
Call access decision component to determine if the entry's protections allow for the creation of new symbolic links
46
Creation allowed?
No
47
Deny create
Yes
48
More entries in list?
No
49
Allow create
Yes

FIG. 5

Example High Level Architecture Relationship between an External Authorization Manager and the Described Symbolic Link Security Method

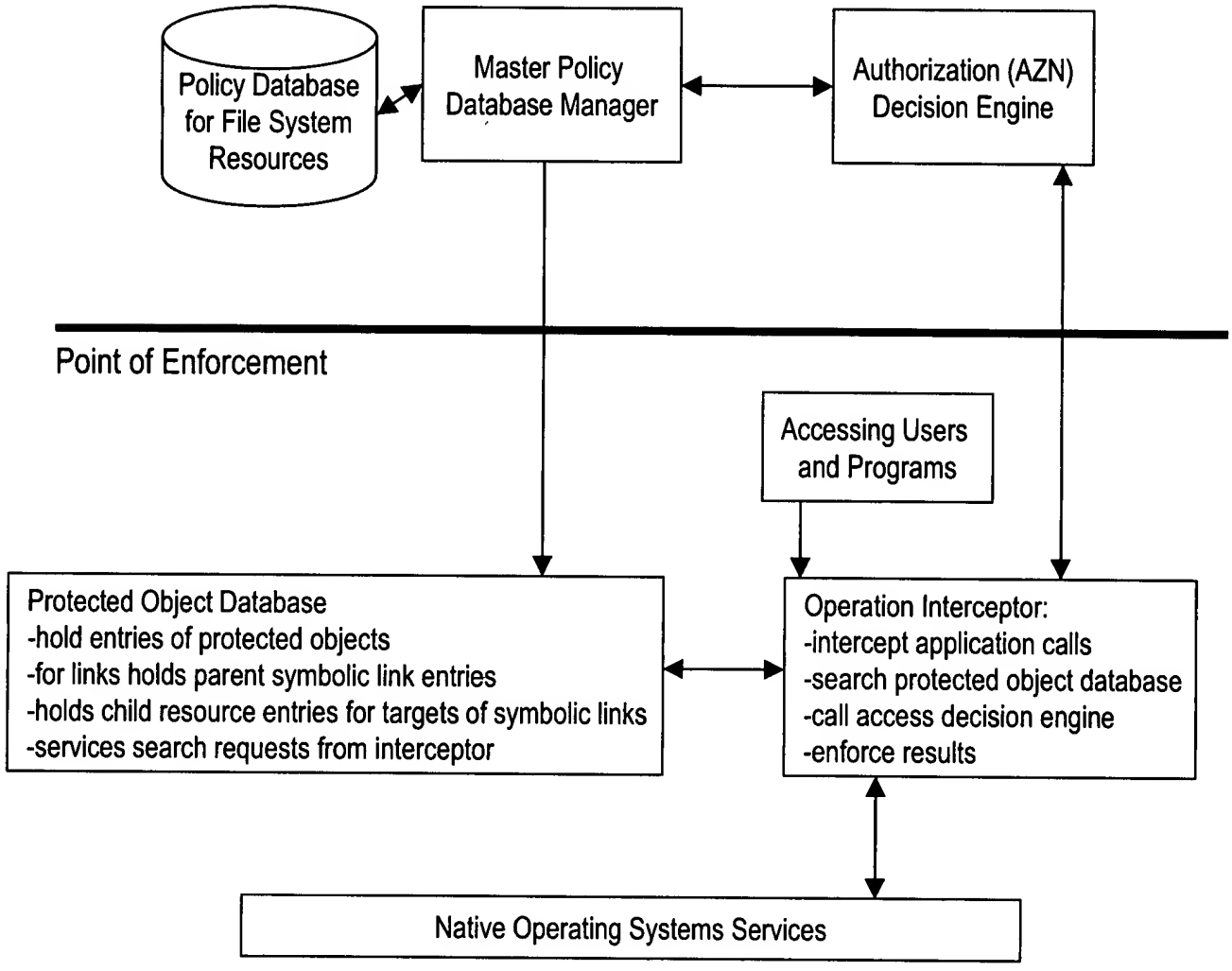

FIG. 6

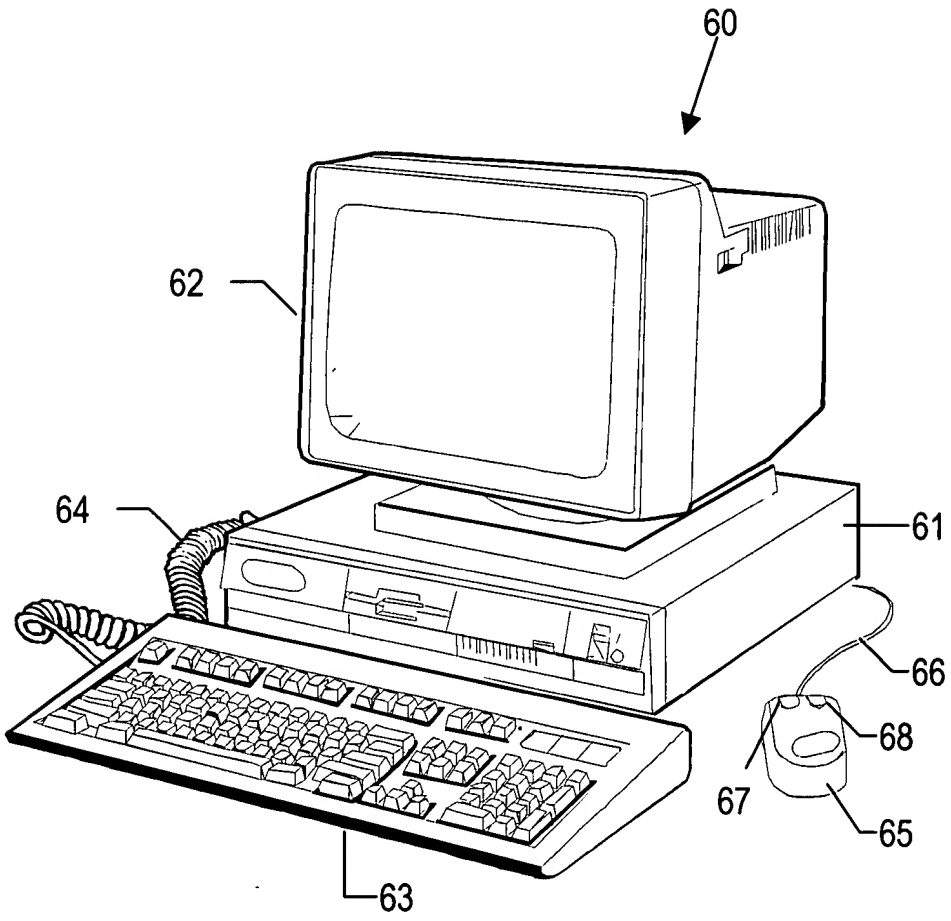

FIG. 7